

### **REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the claim amendments and following remarks.

#### **Status of Claims**

In the amendments above, claims 1, 4-6, 8, 10, 12, 14, 15 and 17-24 have been amended, and claims 25-26 have been added. In addition, claims 2 and 21 have been canceled without prejudice or disclaimer of the subject matter contained therein. Claims 1, 3-20 and 22-26 are currently pending in the application of which claims 1, 10, 14 and 15 are independent. Support for the amendments to the claims may be found in the specification, at least in Fig. 2 and paragraphs [0015], [0016] and [0027]-[0029]. Support for the features in the new claims 25 and 26 may at least be found in paragraphs [0019] and [0020] of the specification.

It is submitted that no new subject matter has been introduced by the above amendments. Entry thereof is therefore respectfully requested.

#### **Summary of the Office Action**

Claims 1-4, 9-11, 14, 18-19, 22 and 24 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Haartsen (US Patent 5,598,459) in view of Kimura (EP 1161031), and further in view of Gerdes et al. (US Published Application 2003/0046541, "Gerdes").

Claims 15-17 and 20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Haartsen in view of Kimura, and further in view of Stewart et al. (US Published Application 2006/0186467, “Stewart”).

Claims 5-8, 12-13, 21 and 23 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Haartsen in view of Kimura, Gerdes, and Stewart.

**Claim Rejection Under 35 U.S.C. §103**

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S.398, 82 USPQ2d 1385 (2007):

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, “[a]ll claim limitations must be considered” because “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385. According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are resolved, there must be a determination of whether the claimed invention would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

(A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006), “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasonings with some rational underpinning to support the legal conclusion of obviousness.”

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

- **Claims 1-4, 9-11, 14, 18-19, 22 and 24**

Claims 1-4, 9-11, 14, 18-19, 22 and 24 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Haartsen in view of Kimura and further in view of Gerdes. The rejection is respectfully traversed for the following reasons.

- **Independent Claims 1, 10 and 14:**

As amended, independent claims 1, 10 and 14 recite an authentication method or system including a provider of a wireless computer network service and a communications

device capable of communicating with a cellular communications service provider and the wireless computer network. Haartsen, Kimura and Gerdes, taken individually or in combination, fail to teach or suggest the recited wireless computer network and communications device in an authentication system.

Haartsen discloses a handover system for handing a cellular telephone 120 from a cellular station 102 over to a local telephone base station 110 (see, for instance, Fig. 3B, col. 2, lines 63-67 and col. 5, lines 5-20). In Haartsen, when the cellular telephone 120 moves from the wide area cellular region 104 of the cellular station 102 into the local phone region 114 of the local telephone base station 110, the cellular station 102 authenticates the base station 110 by sending a challenge code 126a to the base station 110 and, in turn, receiving a response 126b from the base station 110. When the response 126b matches a calculated response in the cellular station 102, the handover occurs (see col. 8, lines 15-17).

Therefore, in Haartsen, the system is related to a telephone network, and not a wireless computer network, as recited in independent claims 1, 10, and 14. For instance, the cellular station 102 of Haartsen is a cellular telephone station (col. 4, line 54), the base station 110 a telephone station (col. 5, line 10), and the cellular telephone includes a cell terminal (col. 5, lines 25-27). Haartsen does not disclose that the cellular telephone 120 is capable of communicating with a wireless computer network. Thus, the base station 110 in Haartsen is not a provider of a wireless computer network service and the cellular phone 120 is not a communications device capable of communicating with a computer network service, as recited in the claims. For at least this reason, Haartsen thus fails to disclose all of the features of independent claims 1, 10, and 14.

Claims 1, 10 and 14 also recite that the communications device sends a request to the cellular communications service provider for verifying the trustworthiness of the wireless computer network service provider. When the cellular telephone 120 of Haartsen enters the local telephone region 114, the cellular telephone 120 does not send any request to the cellular station 102 for authentication of the base station 110. As shown in Figs. 3A-3B and disclosed in col. 7, lines 5-34, when the operating cell phone 120 enters the local telephone region 114, without receiving any request, the cellular network 102 automatically sends a challenge code 126a to the local phone base station 110 via the cellular telephone 120. The base station 110 then sends a local response signal 124a back to the cellular network 102 via the cellular telephone 120. Thus, the cellular telephone 120 of Haartsen does not send a request for authentication to the cellular communications service provider as recited in the claims.

Moreover, during idle operations, Haartsen discloses that the cellular telephone 120 scans for signals from base station 110 and sends a request to the base station 110 for access to the telephone network (col. 5, lines 48-59). The base station 110 then authenticates the cellular telephone 120 in order to prevent unauthorized cellular telephones from accessing the base station 110. Thus, during idle operations, Haartsen discloses that the cellular phone 120 sends an access request to the base station 110, and thus, the cellular telephone 120 does not send a request to the cellular network 102 for trustworthiness verification, as recited in the claims.

The discussions above show that Haartsen fails to teach or suggest a system or method recited in claims 1, 10, and 14. In addition, the Office Action admits that Haartsen fails to disclose receiving an indication of potential use of a wireless hotspot from a user.

The Office Action, however, relies upon the disclosure contained in Kimura as disclosing this feature. In addition, the Office Action contends that it would have been obvious “to apply the teaching of Kimura to Haartsen to provide a system for authorizing or rejecting instruction with respect to the authentication requesting mobile station.”

This assertion is respectfully traversed because, in Haartsen, the authorization or rejection for the cellular telephone 120 from using the base station 110 already exists. Thus, Haartsen does not need to be combined with Kimura to provide the authorization or rejection of the cellular telephone’s connection to the base station. For instance, as disclosed in Haartsen, from col. 7, line 65 to col. 8, line 17, when there is a match between the local response RESP\_L 124a from the base station 110 and any calculated responses RESP\_Nj at the cellular network 102, the cellular telephone 120 is authorized to use the base station 110 for telephone communications. This passage implies that conversely, when there is no match, the cellular telephone 120 would be rejected from using the base station 110 for telephone communications. Therefore, one skilled in the art would not have utilized the teaching of Kimura into Haartsen, as asserted by the Office Action.

Moreover, in Kimura, the mobile stations send requests to an access point device for accessing a wireless LAN system (see [0017]). The access point device is an interface allowing the mobile stations to connect to the LAN system (see [0024]) and is thus not a cellular communications service provider. As such, the mobile stations in Kimura do not send requests to a cellular communications service provider, as recited in claims 1, 10 and 14. Therefore, Kimura fails to cure the deficiencies of Haartsen discussed above.

The Office Action also relies upon Gerdes (paragraphs [0012] and [0035]) for its disclosure of providing the user with an authentication confirmation. However, Gerdes

discloses an authentication server for receiving a request for confirmation the identity of a user from a service provider, and generating a confirmation of the user identity to the service provider. *Gerdes*, pars. [0012] and [0035]. Thus, in *Gerdes*, the authentication confirmation is sent to the service provider, not to the user, as recited in claims 1, 10 and 14. In addition, *Gerdes* fails to teach or suggest that a user sends a request to the cellular communications service provider for verifying the trustworthiness of a wireless computer network service provider. Therefore, *Gerdes* also fails to cure the deficiencies of *Haartsen*.

For at least the foregoing reasons, the proposed combination of *Haartsen*, *Kimura* and *Gerdes* fails to disclose each and every element claimed in independent claims 1, 10, 14, and 14. The Office Action has thus failed to establish that these claims are *prima facie* obvious. The Examiner is accordingly respectfully requested to withdraw the rejection of independent claims 1, 10, 14, and 15 and the claims that depend therefrom and to allow these claims.

o **Dependent Claims 2-4, 9, 11, 18-19, 22 and 24:**

Because claims 2-4, 9, 11, 18-19, 22 and 24 depend from claims 1, 10, and 14, they are allowable over the cited documents of record for at least the same reasons set forth above with respect to independent claims 1, 10, 14, and 15.

• **Claims 15-17 and 20:**

Claims 15-17 and 20 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Haartsen* in view of *Kimura* and *Stewart*. The rejection is respectfully traversed for the following reasons.

As amended, independent claim 15 recites a method for operating a cellular telecommunications provider comprising, among others, tracking the location of a user, determining that the user is within the vicinity of and outside of an operating range of a location-dependent wireless computer network service, authenticating the provider of the service, and providing the authenticated provider to the user. Haartsen, Kimura and Stewart, considered singly or in combination, fail to teach or suggest at least those features.

As discussed above, Haartsen teaches a system and method for handing the cellular telephone 120 from the cellular network 102 over to the local telephone base station 110 when the cellular telephone 120 enters the local phone region 114. In Haartsen, the cellular network 102 authenticates and hands over the cellular telephone 120 to the base station 110 only after the cellular telephone 120 enters the local region 114. Thus, the cellular network 102 of Haartsen does not track the location of the cellular telephone 120 to provide any authenticated computer network service provider in the vicinity of the cellular telephone 120.

Moreover, in Haartsen, when the cell phone 120 is outside the local region 114, the cellular network 102 does not authenticate the base station 110. Thus, Haartsen also fails to teach or suggest determining and authenticating the provider of the wireless computer network service when the user is within the vicinity but outside of the service operating range of the wireless computer network server, as recited in independent claim 15.

In the rejection of independent claim 15, the Office Action cites to Stewart as allegedly disclosing the step of tracking the location of the user and determining that the user is within the operating range of service (paragraph [0015] of Stewart). This rejection, however, is respectfully traversed because the detection of presence of a mobile unit in the vicinity of an access point disclosed in paragraph [0015] of Stewart is performed by the



access point, not by a cellular telecommunications provider, as recited in claim 15. The access point is where the wireless local area network is located (see paragraph [0014]). Thus, the access point is not a cellular telecommunications provider and Stewart therefore fails to teach or suggest a method for operating a cellular telecommunications provider comprising tracking the location of the user and authenticating a wireless computer network service provider when the user is within the vicinity of the service, as recited in independent claim 15. Thus, Stewart fails to cure the deficiencies of Haartsen.

Regarding Kimura, the discussion above shows that Kimura also fails to cure the deficiencies of Haartsen. As a result, the Office Action has failed to establish that the proposed combination of Haartsen, Kimura and Stewart renders independent claim 15 *prima facie* obvious. The Examiner is thus respectfully requested to withdraw the rejection of independent claim 15 and the claims that depend therefrom and to allow these claims.

Depending claims 16, 17 and 20 recite additional features not found in the cited documents of record. For instance, claim 16 recites receiving a request from the user to use the service. As discussed above with respect to claim 1, the cellular network 102 in Haartsen automatically authenticates the base station 110 without receiving a request from the cellular telephone 120. Claim 17 recites that the authentication occurs before the request to use is received. In Haartsen, the authentication of the base station 110 occurs after, not before, the cellular telephone 120 enters the local region 114. Thus, Haartsen and the other cited documents of record fail to teach or suggest that feature of claim 17.

- **Claims 5-8, 12-13, 21 and 23**

Claims 5-8, 12-13, 21 and 23 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Haartsen in view of Kimura, Gerdes, and Stewart. As discussed above, Haartsen, Kimura, and Gerdes, considered individually or in combination with each other fail to disclose all of the features of independent claims 1 and 10. In addition, Stewart fails to make up for the deficiencies discussed above with respect to independent claims 1 and 10 because Stewart fails to teach or suggest a method for operating a cellular telecommunications provider comprising tracking the location of the user and authenticating a wireless computer network service provider when the user is within the vicinity of the service, as discussed above with respect to independent claim 15.

Because Claims 5-8, 12-13, 21 and 23 are dependent from allowable independent claim 1 or 10, they are believed to also be allowable over the cited documents of the record for at least the same reasons set forth above with respect to independent claims 1 and 10. Thus, withdrawal of the rejection of claims 5-8, 12-13, 21 and 23 is respectfully requested.

**New Claims 25-26**

Claims 25 and 26 depend from claims 14 and 15, respectively. Since claims 14 and 15 are allowable over the cited documents, it is submitted that claims 25 and 26 are also allowable for the same reasons. Furthermore, similar to the arguments relating to independent claim 15 above, the cited documents fail to teach or suggest sensing the direction of the user movement to identify and provide additional hotspot locations to the user.

**Conclusion**

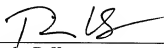
In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

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By

  
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